I. GENERAL

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THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 28 AND MARYLAND AVENUE IN MONTGOMERY COUNTY. THE MODIFICATION INCLUDES UPGRADING EXISTING TRAFFIC SIGNALS WITH APS/CPS AND LED SIGNAL HEADS. MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULLY-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE EAST AND WEST APPROACHES OF MD 28. MD 28 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY AND MARYLAND AVENUE THROUGH MOVEMENTS WILL RUN CONCURRENTLY. THERE IS A PEDESTRIAN PHASE FOR THE NORTH AND SOUTH LEGS OF THE INTERSECTION AND ALTERNATE PEDESTRIAN PHASE FOR THE EAST AND WEST LEGS OF THE INTERSECTION.

EQUIPMENT LIST FOR CONTRACT NO. XY1325185

A EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

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ITEM	QUANTITY	UNIT	DESCRIPTION
9570	17 2 2	SF EA EA	SHEET ALUMINUM GROUND MOUNTED SIGN W11-2 (30" x30") W16-7p (24"x 12")
9571	32 1 1 8 2	SF EA EA EA	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN R10-11b (24"x 24") MAST ARM MOUNTED R3-5L (30"x 36") MAST ARM MOUNTED R10-3(1) (9"x 15") POLE MOUNTED "CITY SIGNS" (30"x 30") MAST ARM MOUNTED
			,

B, EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
6001	8 5	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1050	SF	5 INCH CONCRETE SIDEWALK
6003	46	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	38	EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8005	4	EA	ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER
8008	8	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	4	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8032	4	EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8043	60	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8044	30	LF	WOOD SIGN SUPPORTS UP TO 4' X 6'
8045	49	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	60	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	600	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8061	400	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
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C. EQUIPMENT TO BE REMOVED.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET, ALL OTHER EXISTING SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL.

CONTACTS

Mr. Venu Nemani Team Leader (MO) - Traffic Phone: (301) 513-7491

Mr. Tom Fountain Assistant District Engineer - Maintenance Phone: (301) 513-7304

Mr. Victor Grafton District Utility Engineer Phone: (30I) 5I3-7350

Mrs. Corren Johnson Chief, Traffic Operations Division Phone: (410) 787-7630

Mr. Edward Rodenhizer Manager, Signal Operations Phone: (410) 787-7650

Mr. Sonny Bailey Manager, Sign Operations Phone: (410) 787-7676

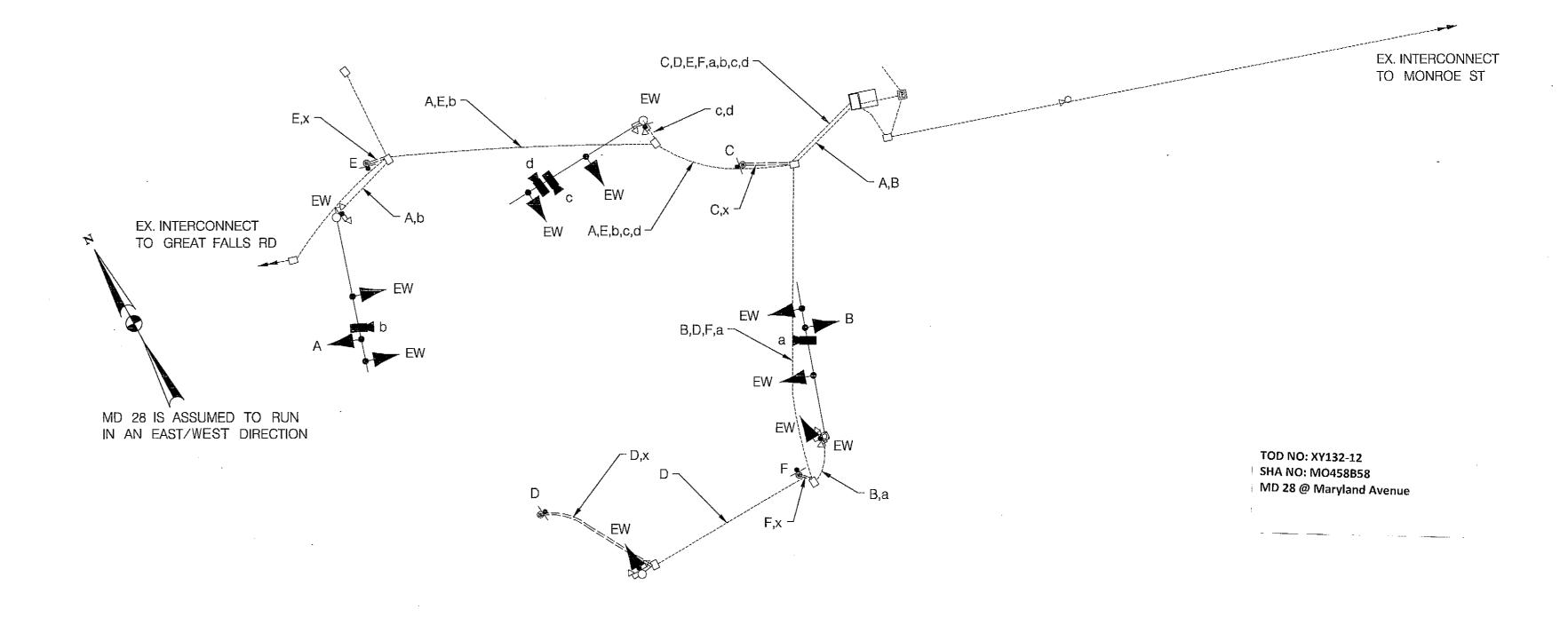
Mr. Mike Stocker 00TS, Signal Warehouse Phone: (410) 787-7696

City of Rockville Public Works Traffic and Transportation Division Phone: (240) 314-8511/8500

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
(4) (4)	(R) (-) Y) (3) (G)	(R) (Y-(Y) (G) (G)		(R) (AY-(Y) (G) (G)	(R) (4Y- Y) (4G- G)	(R) (Y) (G)		(R) (Y) (G)	RYG	RYG								

PHASE 1 AND 5	+G/R	4 -G/R	R	4 -G/R	4 -G/R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	\\ \
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6													V _T						
PHASE 1 AND 6	+ G/G	4 G/G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	-
1 CHANGE	4 Y/G	4 -Y/G	Υ	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 5	R	R	R	← G/G	← G/G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	
5 CHANGE	R	R	R	← Y/G	← Y/G	G	R	Ř	R	R	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	WK	WK	WK	WK	0
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	
2 AND 6 CHANGE	Y	Y	Υ	Υ	Y	Υ	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW	- 4
4 AND 8 CHANGE	R	R	R	R	R	R	Υ	Υ	Υ	Υ	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4 ALT AND 8 ALT	R	R	R	R	R	R	G	G	G	G	WK	WK	WK	WK	DW	DW	DW	DW	ρ Δς
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW	
4 ALT AND 8 ALT CHANGE	R	R	R	R	R	R	Υ	Υ	Υ	Υ	DW	DW	DW	DW	DW	DW	DW	DW	6 V 1 a
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	+ Δ



WIRING KEY

A,B } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

C,D,E,F } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

a,b,c,d } VIDEO CAMERA CABLE

x } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)

+ } GROUND ROD

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 28 (EAST JEFFERSON STREET) AND MARYLAND AVENUE ROCKVILLE, MD

GENERAL INFORMATION PLAN SHEET

SCALE NONE	_ ADVERTISED DATE	3/20 3	CONTRACT NO	XY1325185
DESIGNED BY DRAWN BY		COUNTY_ LOGMILE	MONTGC 150028	
CHECKED BY	AM // 4/13		. L50	
TS NO. 1687-G	DRAWING GI-1	OF 1	SHEET NO.	3 OF 3

BRUDIS & ASSOCIATES, INC.

Consulting Engineers 9240 Rumsey Road; Suite C Columbia, Maryland 21045 Phone 410-884-3607 www.brudls.com

PLOTTED: Wednesday, April 10, 2013 AT 01:57 PM FILE: P:\09-002 TEDD\Task 106 MD 28 @ Maryland Ave\Drawlngs\CADD\Working\pSG-P003_MD28.dgn